APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/760,878	01/17/2001	Takahiko Kawashima	826.1664	4982

21171   7590   06/28/2005

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EXAMINER
ZURITA, JAMES H

ART UNIT	PAPER NUMBER
3625	

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	**Applicant(s)**
Office Action Summary	09/760,878	KAWASHIMA ET AL.
	Examiner	**Art Unit**	
	James H. Zurita	3625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>29 March 2005</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2 and 4-15* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-2, 4-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *15* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

Prosecution History

On 17 January 2001, applicant filed the instant application, claiming priority to application 200-176233, filed 13 June 2000 in Japan.

On 24 March 2004, the Examiner rejected claims 1-6 in a First Office Action.

On 26 July 2004, applicant filed a response, adding claims 7-14.

On 29 October 2004, the Examiner rejected claims 1-14 as unpatentable over Chang (US 6584459).

On 29 march 2005, applicant filed the present amendment, where he cancelled claim 3, amended claims 1, 4-14 and added claim 15.

Response to Amendment

On 29 march 2005, applicant cancelled claim 3, amended claims 1, 4-14 and added claim 15.

Claims 1-2 and 4-15 are pending. See Election/Restriction.

Election/Restrictions

Newly submitted claim 15 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Invention I (amended claims 1-2, 4-14) conclude at the end of Fig. 11.

Invention II, Claim 15 is drawn to a method of managing transaction slip data in electronic commerce, including conversion based on a format used by an order acceptor, and transmitting, classified in class 705, subclass 26.

Inventions I (claims 1-14) and II (claim 15) are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. See MPEP § 806.05(d).

In the instant case, invention II has separate utility such as (emphasis added)

- *converting* the format of received transaction slip data into a format *based on a format used by an order acceptor,* and
- ***transmitting*** the converted transaction slip data to the order acceptor over the network.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 15 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the

- *transaction slip data document,*
- *Management data document,*
- *data extracting unit,*
- *transaction slip data extracting unit*
- *receiving unit*
- *converting unit*

must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action.

The objection to the drawings will not be held in abeyance.

Specification

35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to

comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are:

Applicant uses the term *data* in claims 1, 6, 7 and 11. At times, applicant appears to use identical terms in the claims generically as well as specifically. It is not clear whether applicant claims a patentable distinction among the various types of data and their representation.

Claim Objections

The following claims are objected to because of the following informalities:

Claims 1, 6, 7, 11 and 15 contain the phrase "...converting **the format** of the received transaction slip data into *a format* based on..." Use of the word format renders the claims confusing. For purposes of clarity, the Examiner suggests changing the phrase to phrase "...converting **the format** of the received transaction slip data into *a second format* based on..."

Claim Rejections - 35 USC § 112 – First Paragraph

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 8 and 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to

which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 1 refers to a storing unit for storing data that was extracted by the data extracting unit. Applicant now defines the storing unit as RAM and ROM. *ROM*, Read Only Memory, is a memory chip that permanently stores instructions and data; it contents are created at the time of manufacture and cannot be altered.[1] Applicant does not explain how he can store temporary data after the chip is programmed at the factory.

Claims 8 and 12 refer to "...changing structure information of a document including the management data..." Applicant changed claims 8 and 12 from "...changing structure information of a management data document." Applicant still does not disclose changing *structure information* (e.g., Fig. 10, Fig. 15). Please note that structure information is found in a Data Type Definition (DTD). A DTD is a separate document that contains formal definitions of all of the data elements in a particular type of H TML, SGML or XML document.[2] See for example, references to management data document structure information 8, 9, in paragraph 42. Applicant does not disclose how to change a DTD.

Claims 8, 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed,

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[1] Definition of *ROM*, Computer Desktop Encyclopedia.

had possession of the claimed invention. Applicant does not describe how he changes

a DTD.

Claim Rejections - 35 USC § 112 – Second Paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

In claims 1-2, 4-14 the term **data** renders those claims indefinite for failing to

particularly point out and distinctly claim the subject matter which applicant regards as

the invention. *Data* is used variously as a generic term, encompassing transaction slip

data, management data, as in the preamble of claim 1, for example. However, the body

of claim 1 refers to data in a generic way, and introduces two additional types of data,

including management data and transaction slip data. These appear to correspond to

management data (Fig. 3, item 4) and content data (Fig. 3, item 5). For purposes of this

Examination, the term management data will be interpreted to refer to Fig. 3, item 4; the

term transaction slip data will be interpreted to refer to content data, as in Fig. 4, item 5.

Applicant's ***document*** will be interpreted as a file. The terms ***document***

including transaction slip data (claims 1, 5, 7, 11 and 13) and ***document including***

management data (claims 8 and 12) will be interpreted as referring to the contents of a

single input file (file type ***xml).*** The single input file contains two types of data, content

data (aka transaction slip data) and management data (aka management data), as n

Fig. 2. As per paragraph 44, the input file is split into two files. One file, with file type

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[2] Definition of *DTD*, MICROSOFT PRESS Computer Dictionary.

ctl, contains only management data, as described in Fig. 2 by <header> </header>

tags. The other file, with file type *doc,* contains only content data, as described in Fig. 2

by <record> </record> tags. Each file is saved in a database. The data contained

therein is associated with a key which applicant calls a *"document identifier."*

Claims 1, 6, 7 and 11 contain the phrase "...in order that the order issuer can

have an electronic business with the order acceptor without tailoring functions of

*server*s of the order issuer or the order acceptor..." which renders the claims indefinite.

The actions occur outside the metes and bounds of the claims and describe inferential

activities that take place outside the claims.

Claims 1, 6, 7 and 11 contain the phrase "...without tailoring functions of *servers*

of the order issuer or the order acceptor..." which renders the claims indefinite. It is not

clear what functions of servers applicant refers to, since XML is designed so that sender

and recipient share a common data format and thus, the use of XML itself reads on

applicant's limitation.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

Claims 1-2 and 4-14 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Chang et al (US 6584459).

Chang discloses an EDI/XML environment that manages documents containing

transaction data (applicant's transaction slip data documents) in electronic commerce,

with database devices.

As per claims 1, 6, 7 and 11, Chang discloses:

- *extracting* data as a search item of the transaction data document therefrom. See,

  for example, at least Col. 20, lines 1-50.

- **storing** the extracted data in correlation with the transaction data; see, for example,

  at least Col. 20, line 55-Col. 21, line 15.

- *searching* the extracted data so as to extract correlated detail data. See at least

  Col. 21, line 16-Col. 22, line 40, Col. 23, line 52-Col. 25, line 60.

- *transmitting* the detail data extracted in the search step. See at least sending

  results to interfaces, at least Col. 5, line 12-Col. 6, line 45.

- *receiving* the transmitted detail data. See, for example, at least Figs. 1, 2 and

  related text, and references to various units that receive transmitted detail data.

- *converting* the format of the received detail data into a format with which a

  transmission destination can deal, as in Fig. 2, DB2 XML extender, which converts

  data to and from formats used by other systems and parties.

Chang *does not* specifically recite applicant's latest language,

> ...wherein the format of the received transaction slip data is used by an order issuer and the
> converted format based on a transmission destination is used by an order acceptor ...

The Examiner notes, however, that the new language, when considering each

claim as a whole, carries little patentable weight. The Examiner finds that the language

merely describes inferential activities not positively recited and not actively involved with

method claim 7 and are thus outside the metes and bound of claim 7. In apparatus claims 1, 6, 11, the language merely recites intended use, and again describe inferential activities that are not part of the claims.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Chang and general knowledge to disclose

> ...wherein the format of the received transaction slip data is used by an order issuer and the converted format based on a transmission destination is used by an order acceptor...

One of ordinary skill in the art at the time the invention was made would have been motivated to combine Chang and general knowledge to disclose

> ...wherein the format of the received transaction slip data is used by an order issuer and the converted format based on a transmission destination is used by an order acceptor...

For the obvious reason that by doing so, one is able to provide searching of content and attribute values of elements of an XML document based on specified sequencing/indexing of such data elements.

Chang **does not** specifically recite applicant's latest language,

> ...in order that the order issuer can have an electronic business with the order acceptor without tailoring functions of servers of the order issuer and the order acceptor.

As above, the Examiner notes, however, that the new language, when considering each claim as a whole, carries little patentable weight. The Examiner finds that the language merely describes inferential activities not positively recited and not actively involved with method claim 7 and are thus outside the metes and bound of claim 7. In apparatus claims 1, 6, 11, the language merely recites intended use, and again describe inferential activities that are not part of the claims.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Chang and general knowledge to disclose

...in order that the order issuer can have an electronic business with the order acceptor without tailoring functions of servers of the order issuer and the order acceptor.

One of ordinary skill in the art at the time the invention was made would have

been motivated to combine Chang and general knowledge to disclose

...in order that the order issuer can have an electronic business with the order acceptor without tailoring functions of servers of the order issuer and the order acceptor.

Or for any other purpose such as providing good management solutions for

handling any type of data that might benefit electronic commerce among parties.

Chang **does not** use the labels *data extracting unit, storing unit, transaction slip*

data extracting unit, transmitting unit, management data, transaction slip data,

management data document, document identifier, order issuer, order acceptor, among

others.

However, the labels given to various actors and modules are not functionally

related to the substrate of the article of manufacture. Thus, this descriptive material will

not distinguish the claimed invention from the prior art in terms of patentability, see *In re*

Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32

F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to apply a label to various actors and modules in a

system such as *Chang* because such data does not functionally relate to the substrate

of the article of manufacture and merely labeling the data differently from that in the

prior art would have been obvious.   See *Gulack* cited above.

As per claim 2, Chang discloses that correlation between data is managed with

a key that is common. See, for example, at least references to DocId, Index, Key, RID,

at least Fig. 4, 6, 12-13 and related text. See also at least Col. 19, line 1- Col. 20, line
50. See also references to primary keys, foreign keys, DTDid, and other keys that
correlate data among the various data objects, at least Col. 13, line 1-Col. 15, line 48.

As per claim 4 Chang discloses that users are allowed to define new searches
for retrieval of XML documents. See, for example, at least Col. 6, lines 19-45.

As per claims 5, 9 and 13, Chang discloses that the document containing
transaction data is an XML document. See, for example, at least Col. 2, line 18-Col. 3,
line24, Col. 3, line 47-Col. 4, line 18, Figs. 3, 8, 9 and related text.

As per claims 5, 10 and 14, Chang discloses that users are allowed to define
new searches for retrieval of XML documents. See, for example, at least Col. 6, lines
38-45, Col. 7, line 54-Col. 8, line 3. As per claims 5, 10 and 14, a user may alter targets
of a search by changing a search query according to particular tags found in XML
documents, such as an author tag in XML document of Col. 5 that is used as a search
parameter in the query found in Col. 20.

As per Claims 8 and 12, interpreted in light of 35 USC 112, first paragraph.
Chang discloses that users are allowed to define new searches for retrieval of XML
documents. See, for example, at least Col. 6, lines 38-45, Col. 7, line 54-Col. 8, line 3.

Response to Arguments

Objections to the drawings are partially withdrawn.

The Examiner acknowledges applicant's correlation of

- storing unit as RAM 1504 and ROM 1503;
- transmitting unit as information provider 1507, network 1506 and communications
  interface 1505.

The Examiner also acknowledges that applicant now limits his invention to storing data only in temporary storage and that the data is lost under certain circumstances, since *RAM,* Random Access Memory, is the computer's primary workspace and requires power to maintain its content and therefore any running programs and all the data they currently reference are lost without power.[3] Concerning ROM, please see rejection under first paragraph of 35 USC 112.

However, the Examiner's objection concerning **receiving unit** is maintained, since the transmission appears to end at an interface that applicant labels a *communication* interface. An interface is the point at which a connection is made between two elements so that they can work with each other or exchange information. Applicant fails to identify a receiving unit on the other side of the "communication" interface.

Applicant's general non-specific references to Figs. 3, 7, 8, and 16 do not overcome the objections under 37 CFR 1.83(a) that require drawings to show every feature of the invention specified in the claims.

Objections to the specification are maintained.

The Examiner notes that the 14 pages of annotated substitute specification has introduced additional errors. Some examples follow:

Paragraph numbers do not match paragraph numbers found on US PG-PUB 2001/0051899A1. Where applicant refers to paragraph numbers, it is not clear which version is being used for support. For example:

> Regarding the objection to claims 8-12 [sic] Applicants respectfully point that "changing structure information" is discussed in the specification in paragraphs [0057]-[0060]. [amendment, remarks, page 8, response to objections to claims]

PG-PUB, page 4, starting with "The annotated controlling module 16d..."

Annotated, pages 12-13, starting with "...Fig. 14 is a block diagram..."

Nevertheless, a close examination of paragraphs 57-60 in both original and annotated versions does not disclose changing structure information of claims 8 and 12.

Applicant argues that <u>objections to the claims</u> should be withdrawn.

Objections to claims 8 and 12 are maintained. See previous office action.

Claim 13 should read "currently amended" to reflect that fact.

<u>Rejections under 35 USC 101</u> are withdrawn in view of amendment.

Applicant argues that no prima facie case of obviousness has been made and that the reference does not teach the limitations added to claims 1, 6, 7, 11 and 15.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Applicant appears to have moved limitations of cancelled claim 3 into claims 1, 6, 7, 11 and new claim 15. Applicant argues that Chang teaches

> Chang does not [sic] teach any ...converting of a format of a received transaction slip for an order issuer and acceptor. Chang merely teaches (see, for example, Col. 7, starting at line 45) a converting of UDFs 144 convert XML files into a storage format with predefined attribute values, storing XML documents internally within the DB2.RTM."

> That is, Chang merely [sic] teaches taking out data contained in an XML document and converting the data into that of a database-storage format and conducting a search of the data thus taken out.

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[3] Definition of *RAM*, Computer Desktop Encyclopedia.

In response to these arguments, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Further, the Examiner respectfully directs applicant's attention to other portions of Chang that specifically describe storing and searching data content and attribute values of elements of an XML document. See, for example, at least Col. 4, lines 1-4. See also references to XML_DTD_REF; each row represents a DTD with additional metadata information, Col. 12, lines 35-60. Please see references to *author* to contain author data from an XML data file, in the create table statement for xml_dtd_ref . See also how an author's name may be cross referenced, such as in the create table xml_columns, constraint xmlco_fk, which references the key of xml_dtd_ref as xml_dtd_ref(id). In addition, please see discussion of XML documents that have different DTDs, as in Col. 18, lines 27-67.

Examiner cites particular columns and line numbers in the references as applied to the claims for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James H. Zurita whose telephone number is 571-272-6766. The examiner can normally be reached on 8a-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wynn Coggins can be reached on 571-272-7159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

James Zurita
Patent Examiner
Art Unit 3625
17 June 2005

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